

The Claims Defining the Invention are as Follows

1. A building formwork module for use in a modular formwork system, the module comprising a first face and a second face that are connected by a web, the faces and web defining two channels that extend along the longitudinal length of the module, which channels are able to accommodate wall forming material such that the wall forming material is able to solidify therein, the web in the module, providing the module with a rigidity that maintains a relatively flat outer surface on at least the first side of the module against what would be the pressure applied by wall forming material as it solidifies within the two channels.
2. A building formwork module as claimed in claim 1 wherein the module is produced by an extrusion moulding process in which the faces and web are formed in one action.
3. A building formwork module as claimed in claim 1 or 2 including two lateral sides connecting the faces and spaced either side of the web so as to define the two channels with the web and the faces.
4. A building formwork module as claimed in claim 3 wherein the web is spaced midway between each lateral side, the two channels are rectangular in cross section, and the width of each lateral side is greater than 50mm but not less than 1/50 of the length of the module.
5. A building formwork module as claimed in claim 3 wherein the web is spaced midway between each lateral side, the two channels are square in cross section, and the widths of the first and second faces are equal, being about twice the width of each lateral side.
6. A building formwork module as claimed any one of claims 1 to 5 wherein the module, by its construction, is readily handled and transported around a worksite as an integral module.

7. A building formwork module as claimed any one of claims 3 to 5 wherein the lateral sides are suitable for abutting against the lateral sides of other building formwork modules, the lateral sides include a plurality of aligned flow holes such that when one of the lateral sides of the building formwork module is abutting in aligned relationship with the lateral side of another building module having corresponding flow holes, wall forming material is able to flow through the flow holes from the building formwork module into the other formwork module, further wherein the web includes flow holes allowing the wall forming material to flow between the channels of the building formwork module.
8. A building formwork module as claimed any one of claims 1 to 6 wherein the modules are configured to prevent the penetration of water by making the water follow a tortuous path.
9. A modular formwork system comprising a plurality of building formwork modules, each module comprising a first face and a second face that are connected by a web, the faces, lateral sides and web defining two channels that extend along the longitudinal length of the module, which channels are able to accommodate wall forming material such that the wall forming material is able to solidify therein, the web in each module, providing the module with a rigidity that maintains a relatively flat outer surface on at least the first side of the module against what would be the pressure applied by wall forming material as it solidifies within the two channels.
10. A modular formwork system as claimed in claim 9 wherein each module includes two lateral sides connecting the faces and spaced either side of the web so as to define the two channels with the web and the faces.
11. A modular formwork system as claimed in claim 10 including a spacer comprising a body having a first and second side, the first side having a cavity for longitudinally receiving a lateral face of any one of the building modules and the second side having an oppositely directed cavity for longitudinally receiving a lateral face of another of the building modules, such that when

both building modules are received in the respective cavities of the spacer, the channels of the building modules are aligned one after the other in series.

12. A modular building formwork system as claimed in claim 11 wherein the spacer includes a first projection extending substantially beyond the faces of the modules, on one side, when received in the cavities of the spacer, the first projection including mounting means for mounting a first planar sheet along that side.
13. A modular building formwork system as claimed in claim 12 wherein the spacer includes a second projection extending substantially beyond the faces of the modules, on an opposite side, when received in the cavities of the spacer, the first projection including mounting means for mounting a first planar sheet along that opposite side.
14. A modular building formwork system as claimed in any one of claims 10 to 13 wherein the lateral sides of each module are suitable for abutting against the lateral sides of other building formwork modules, the lateral sides include a plurality of aligned flow holes such that when one of the lateral sides of a building formwork module is abutting in aligned relationship with the lateral side of another building module having corresponding flow holes, wall forming material is able to flow through the flow holes from the building formwork module into the other formwork module, further wherein the web of each module includes flow holes allowing the wall forming material to flow between the channels of the building formwork module.
15. A modular formwork system as claimed in any one of claims 9 to 14 further including a brace arrangement comprising a first brace member and a second brace member for defining a brace channel in which the building modules are to be held in vertical alignment during the construction of a wall, the brace arrangement being arranged to hold the modules such that a length of the wall forming material solidifies within the brace channel.

16. A modular formwork system as claimed in claim 15 where the length forms a continuous ring beam.
17. A modular formwork system as claimed in claim 15 or 16 wherein wall forming material is able to be poured into the brace channel and flow therefrom into the two channels of each of the modules under the action of gravity.
18. A modular formwork system as claimed in any one of claims 15, 16 or 17 including means for attachment to the brace arrangement and support tower, which means are selectively operable to move the brace arrangement in a horizontal plane substantially aligned with the ground on which the support tower rests.
19. A modular formwork system as claimed in any one of claims 15 to 18 wherein the first and second members each comprise a length of C-section having a base and two arms, the base of each of the first and second members in the brace assembly for being arranged back to back to define the channel and the arms for providing the final structure with improved strength.
20. A modular formwork system as claimed in any one of claims 15 to 19 wherein the system includes the support tower which includes a triangular base having a foot at each corner, at least two of the feet being adapted to be fastly anchored to the ground.
21. A method of constructing a wall using a modular wall forming material formwork system including:
- holding a brace arrangement above the ground, the arrangement providing a channel in which a plurality of building formwork modules can be received;
 - inserting modular formwork modules into the channel such that they extend from the ground in accordance with a floor plan, each of the modules having a first face and a second face which are connected by a web
 - the faces and web of each module defining two channels that extend along the longitudinal length of the module;
 - pouring wall forming material through the brace arrangement such that the

wall forming material flows and fills the modules and reaches and hardens within the channel forming by the brace arrangement; and

allowing the wall forming material to harden to a sufficient strength to form the wall.

5 22. A method as claimed in claim 21 including providing a channel to receive the modular building modules on the ground, and adjusting the horizontal disposition of the brace arrangement using adjustors that hold the brace arrangement above the ground, such that the modular building modules are held vertically produce a vertical wall forming material wall to a predetermined
10 standard.

23. A method as claimed in claim 21 or 22 including inserting reinforced steel bars though the modular formwork modules both vertically through the channels and horizontally through aligned flow flows in their webs, before the wall forming material is poured.

15 24. A building formwork module substantially as herein described with reference to the accompanying drawings.

25. A modular formwork system substantially as herein described with reference to the accompanying drawings.

20 26. A method substantially as herein described with reference to the accompanying drawings.